

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SANDS & NEILSON—EDITED BY E. P. ROBERTS.

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BALTIMORE, MD. MARCH 14, 1837.

Vol. III

THIS publication is the successor of the late
AMERICAN FARMER,

and is published at the office, at the N. E. corner of Market and Charles streets, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MARCH 14, 1837.

The editors of papers with whom we exchange will confer a favor by inserting the subjoined Prospectus a few times in their respective papers.

EDW. P. ROBERTS & SANDS & NEILSON

Having purchased the Establishment of the

FARMER & GARDENER,

Successor to the

AMERICAN FARMER,

And being desirous to place it within the reach of every agriculturist in the United States, have concluded to *reduce its subscription price from five dollars, to two dollars and a half*, per year, from and after the beginning of the next volume, which will commence in May next.

It is now nearly eighteen years since the American Farmer was first established. Prior to its institution, there were no paper exclusively devoted to agriculture in the country, and it will not be arrogating any thing but what it deserves, to say, that, as it was the pioneer in the good work, the labors of its former conductors must have been productive of much solid advantage to those for whose benefit it was established. In continuing its publication, the present proprietors flatter themselves that its pages will be found to contain matter at once calculated to instruct and interest the agricultural reader. So far as they are concerned, they are determined to conduct it with industry, unflinching perseverance, and with undivided attention to the great and important purposes which called it into existence. They feel certain that none of its patrons will have

cause to complain, at the end of their subscription that they have left any effort unessayed to make it worthy of their confidence and support.

In reducing its subscription price, they have ventured upon an experiment full of risk and responsibility, and as they have done so under the influence of motives which they must be permitted to say should commend it to a greatly in-

creased subscription—as they can alone look to that as the source of their remuneration—and as in so doing, their labor will be much increased—they appeal to its present patrons to aid them in giving it an extended circulation. They are confident that those who now honor them with their support, can, without personal inconvenience, in their own immediate neighborhoods, and among their personal friends, by using their deserved influence, procure such an addition to their present list of subscribers, as will not only realize their fondest expectations, but place them under renewed obligations of interest and gratitude, to render the *Farmer and Gardener* a welcome visitor to the fireside of every farmer and planter.

The *Farmer and Gardener* will at once be a faithful repository of original communications from practical agriculturists and horticulturists, and of judicious selections from every other available source. Foreign, and domestic agricultural, and scientific works, will be constantly resorted to, for the purpose of furnishing materials calculated to advance the prosperity and happiness of the country, and of adding to the intelligence of the American husbandman.

In fine, whatever concerns the business of the farm, domestic animals of all kinds, newly invented implements of husbandry, those of approved utility now in use, together with the principles and practice of agriculture, horticulture, and gardening generally, will be regularly and conscientiously noticed. The prices of produce in this market, and the value of bank notes will be weekly laid before its readers.

With a view of keeping their patrons advised of all superior breeds of animals already introduced, or which may be hereafter imported, they will seize the earliest opportunity of translating all such information to the columns of their journal.

TERMS, &c.

Price two dollars and fifty cents per annum for all subscriptions paid in advance, or within one month from the date of subscription—all subscriptions which remain unpaid beyond that period, will be charged at the rate of three dollars per year.

The *Farmer and Gardener* is published every Tuesday, is printed on fine paper, with a beautiful bold type.

The portion of the Geological Survey of Maryland, which we publish to-day, is replete with interest, not only to the inhabitants of the county immediately concerned, but to every section of our country, and especially to those parts bordering on tide water. Similar inexhaustible calcareous resources, which have been brought to light by Professor *Ducatel*, in his survey of Calvert county, may be, and doubtless are imbedded in various other districts of our wide spread territory, and only require to be searched for to be rendered contributory to the agricultural prosperity and welfare.

TIMELY OBSERVATIONS ON APPROPRIATE OBJECTS OF SPRING CULTURE.

Although it is too early to put any of the articles, which we shall herein touch upon, into ground, it is nevertheless, not too soon to call the attention of our agricultural brethren to them, in order that they may have time to make all necessary and proper arrangements, to cultivate such of them as they may undertake, in a way that shall prove equally as creditable as profitable to them. It is a fact sustained by the experience of the best agriculturists, that as much depends upon the manner of culture, as on the quality of the soil, whether the product be large or small. This doctrine is, we are aware, carried too far in the theory of *Tull*; for he maintains with great power and plausibility, that pulverization, proper pulverization, is all that is wanting to make any soil highly productive.—This was claiming too much, and throwing suspicion around a most excellent agent in the art of agriculture. It was, in fact, detracting from its merits, and weakening the force and importance of one of the best means known to the husbandman to render the earth fruitful.

Whilst we are most strenuous advocates for deep and frequent ploughing; rolling, harrowing, and re-rolling, until all lumps are properly reduced, we hold it with equal zeal, that all soils must be nourished with alimentary and calcareous manures to render them permanently productive.

With this brief explanation, we will enter at once upon the remarks which we at present pur-

pose to make. The last winter, so trying to most farmers, so peculiarly severe upon many, has just past, and while the recollection of its pressure is still fresh upon the memory of all, let each resolve to profit by the sad experience of the past, and turn it to the best account. But first of all, with a view of improving time, we will devote a few words to the coming crop of

CORN.

This grain, as we all know, is, when well cultivated, capable of yielding more grain to the acre—more farinaceous material—than any other, and such is its peculiar aptitude to accommodate itself either to the long summers of our more southern region, or the short ones of the east, that varieties which take all the fructifying influence of the former to ripen their kernels, when translated to the latter, so accommodate themselves to the more brief duration of summer in that quarter, as to perform all its work of maturing before the autumnal frosts. But with all its excellent qualities of nutrition, productiveness, and acclimation; there is no crop more uncertain or precarious: there is none which better rewards high and neat cultivation, or punishes with more severity, he who tampers with its growth in a slovenly manner, on soil despoiled of its virgin strength, and when niggardly denied assistance by the besotted being, whose cupidity and ignorance, has made him at once as reckless of his own permanent interest, as of the necessities of the earth, whence he would impiously draw his sustenance. We say it is an uncertain and precarious crop, and so it is:—while *Earl Stimson*, of New York, that prince of corn-growers, will average upwards of 100 bushels to the acre in a crop of 5,000 bushels, we could point to those who do not, in many instances, make over two barrels to the acre. Perhaps these gentlemen would say, "Ah but Mr. Stimson's land is very rich, and then he manures highly." Not so:—naturally, the soil of Mr. S's farm is very poor, being 54 per cent. of pure silex, and only 3 of the carbonate of lime; and so far from his manuring highly, he does not give more than an ordinary portion of manures. He "manures his land only once in six years, excepting the application of plaster to his corn. He allows five loads of barn yard manure, and three of leached ashes, to an acre, and this is always spread upon the surface after ploughing for the first crop, and either harrowed or ploughed in by a very light ploughing. In ploughing he never permits the plough to go deeper than three inches; the sod is turned over flat, and then rolled, it being his great object to keep all the vegetable matter on the surface." With this moderate supply of the wants of his

soil, for ten years prior to 1832, his crops of corn ranging above 5,000 bushels annually, have averaged the product stated, viz. over 100 bushels to the acre. We have not exhibited this plan of Mr. Stimson because it meets our entire approbation; for there are parts of it to which we would object, and yet the result of his labors, the safest mode of arriving at truth, would tell us that his plan is just suited to his light sandy soil. If left to our own judgment, we would go deeper: tho' we had to use the *substratum plough*, we would find a highway for the larger roots of the corn to draw their liquid cordial from the bosom of the earth.

The great art, in Mr. Stimson's case, consists in doing every thing at the right time; he never permits his corn to suffer in consequence of weeds, or a baked and parched earth—the weeds before they can possibly operate injuriously are expelled, and the earth is always kept loose and fresh around the plants, attracting moisture from the atmosphere, and drinking in the sweet and animating dews as they fall; thus preserving to the growing corn a continuous supply of wholesome, refreshing and digestive aliment. We should mention here, cursorily, that his corn rows are but 27 inches apart, that he plants the small northern corn, and leaves 4 plants in each hill, so that each acre in culture by him contains 50,300 plants.

The stating of this latter fact, points to us a moral, which we could wish our readers generally, and particularly those in the middle, southern and western states to pay particular attention to, as we desire that they should profit by it. It is an undeniable fact, that all very large products of corn have been the result of close planting. In this fact, their greater assiduity and neatness in its culture, and the application of proper manures, are we to find the true causes why the eastern farmers so far excel us in the product of this indispensable grain. While most of us have our rows ranging from 6 to 4½ feet, with but 2 plants in a hill, the more economical Yankee places his rows at from 27 inches to 3 feet, and instead of having 2 plants at each point, there are 4. Now let us see what an immense difference in product is thus brought about. Rows 27 inches either way apart, 4 plants in a hill, as we have before shown, give us 50,300 plants: Rows 5 feet either way, 2 plants in a hill, give us but 1742 hills or 3484 plants:—while the first, yielding a gill of shelled corn for each stalk is competent to grow 118 bushels, 8 quarts, to the acre, the latter at the same ratio of yield, can only give the pro-

duct of 13 bushels 16 qts.; or supposing the ears on the wide planted corn, should produce 8 times as much as that planted close, or 8 gills to the stalk, how stands the account then? Why 39 bushels 18 quarts is the product; and, indeed, if it should average a pint to the stalk, still its yield is far, very far, behind that of the closely planted corn; for in that event, it would reach but 54 bushels; being less than 50 per cent., of the product of the other.

We know that it will be alleged by those who have trodden in paths rendered venerable and venerated by their antiquity, and peculiar associations, that our soil will not bear such close planting; neither would that of Mr. Stimson, nor that of any other northern or eastern gentleman do so, if they did not in a spirit of justice, occasionally return something to the earth to comfort its bowels, and compensate it for its givings out: and surely there is no corn-planter this side the Hudson, that could not once in 6 years afford to give in the proportion per acre of 5 loads of barn yard manure and 3 of leached ashes, or their equivalents. According to Mr. Stimson's rotation of crops, and plan of improvement, his corn crop gets no manure whatever, except plaster on the hill. His rotation is:—

1. Wheat—manured.
2. Corn—plastered.
3. Flax, Rye or Barley.
4. } Clover and Herds' grass.
5. }
6. Pasture.

If by a little attention we can make 1 acre produce us what it heretofore took 4 or 5 to do, surely upon the score of economy we are bound to adopt that plan if it be not too costly: and as close planting is no otherwise more costly than the wide, except in the extra quantity of seed, we affirm unhesitatingly that no one should hesitate to make the proper experiment. "Ah! but if you plant too close, it will fire the corn." It will do no such thing; it used to be a dogma among planters, that, if ground were stirred in a dry spell it would burn up every vestige of the growing vegetables; but this absurd dictum of other days, has lost many of its worshippers: experience, common sense, and human reason, have all combined to ferret it out of the affection of many of those who once received it as oracles.

Let us hear what one of the best farmers in our country says upon this part of the subject.

In the Massachusetts Agr. Rep. John Lowell advances these clear and conclusive remarks:

"In this extraordinary [very dry] season, I had a small patch of early potatoes, planted in a warm and sandy soil, purposely to procure an early

crop; the soil was at least three quarters pure sand, mixed with some food for plants among the sand. The severe drought threatened a total loss of the crop. The potato stalks were feeble, drawn up, scarcely larger than goose quills, and I expected every day to see them wither; all hopes of a crop were abandoned. I thought they were the fair subjects of a *desperate experiment*. On one of the hottest and driest days, I gave them a thorough ploughing, passing the plough four times through each row; first ploughing two furrows from the hills, as near the roots as possible, without throwing out the seed potatoes, and then returning the loam or earth instantly back by two other furrows. No rain intervened for ten days. In three days after, the potatoes changed their color, they started afresh, as if they had received the benefit of ample showers, while not a drop had fallen. The dews, which were abundant, settled upon the new turned earth, while before the ploughing no moisture had been apparent."

This solitary fact speaks volumes and will go far to reconcile practical men to leave the shadow for the substance.

Having quoted the success of Mr. Stimson in evidence of the efficacy of close planting, we will sustain the propriety of his system by showing that several others have produced *large crops* by the same means:

Mr. Stevens, of New Jersey, near New York, averaged on 3 acres, upon each of which he placed 26,880 plants, 118 bushels of corn per acre; the distance about 5 feet one way by 8 inches in the drill.

Mr. Ludlow, of New York, raised on 3 acres at the rate of 98 bushels to the acre—his rows were 4 feet, the plants 8 inches asunder.

Mr. Lorain, of Pa. raised 91 bushels to the acre: his plan was double rows $8\frac{1}{2}$ feet wide, the number of plants 20,000.

Messrs. Pratts of Madison county, New York, obtained 170 bushels per acre; they used 7 bushels of seed to the acre, the plants being subsequently reduced to the requisite number. They grew this prodigious crop 3 rows in a drill, 3 feet from centres of drills, as is represented in the following diagram:



Putting 43,560 plants on an acre, and raising 170 bushels and 5 quarts.

Mr. Buel on a small scale raised at the rate of 10 bushels 10 quarts per acre.

We might enumerate numerous other persons, but will refrain from doing so, and shall content ourselves with having proved the fact that the large products are the result of close planting. We shall annex a table which will be instructive, so

far as to demonstrate the certainty of a heavy yield by means of *close* and good culture, and the improbability of any *immense* results when left to the auspices of the wide culture.

These tables it will be seen, contain estimates severally ranging at 1, $1\frac{1}{2}$, 2, and 3 gills of shelled corn per stalk. So far as the close planting is concerned, as the ears of the northern corn are small, we deem it prudent to say, that their yield *per ear* will scarcely ever exceed 1-2 gill, tho' they may sometimes reach 2 gills—the calculations, therefore, in the *two last columns* are filled up more for form sake than any thing else, except for the produce of wide planting. The large eared corn mostly grown on *wide* rows, at *wide* distances, would be likely to furnish ears having 3 gills or more of shelled corn on them. Indeed we have seen 4 gills shelled off of a single ear. For

the accommodation of such ears, we made our two last columns, and therefore consider this explanation necessary.

We ask all our readers to examine the table we have made out, with care. If they do so, they will perceive that under very rare circumstances of singular good fortune, corn planted 5, 4 1-2, or 4 feet apart either way, with two stalks in the hill, can scarcely ever exceed 40 or 50 bushels to the acre; that the number of stalks requisite to large yields, is wanting: but that by close planting, proper manuring, and culture, above a hundred bushels to the acre may be grown, allowing to each stalk only the capacity of bearing 1 gill of corn.

With these explanations and remarks, we subjoin the table, and bespeak for it all proper attention.

No. of various methods.	Distance of rows apart.	Distance of plants apart in the rows or drills.	No. of plants in a drill.	No. of hills in an acre.	No. of plants on an acre.	Product of an acre at 1 gill of shelled corn per stalk.	Product of an acre at $1\frac{1}{2}$ gill of shelled corn per stalk.	Product of an acre at 2 gills of shelled corn, per stalk.	Product of an acre at 3 gills of shelled corn per stalk.
						bush. gals.	bush. gals.	bush. gals.	bush. gals.
1	$2\frac{1}{4}$ by $2\frac{1}{4}$	27 inches	4	7575	30,300	118 8	177 12	236 16	354 24
2	" " $2\frac{1}{2}$	30 "	4	8712	34,848	136 4	204 6	272 8	408 12
3	4 " 4	4 feet	4	2722	10,888	42 16	63 24	85 0	127 16
4	3 " 3	3 "	4	4840	19,360	75 20	113 14	151 8	226 28
5	3 " 1	1 foot	1	14,520	14,520	56 20	84 30	113 8	169 20
6	3 ft. " 9 in.	9 inches	1	19,360	19,360	75 20	113 14	151 8	226 28
7	$4\frac{1}{2}$ " $4\frac{1}{2}$	$4\frac{1}{2}$ feet	2	2151	4302	16 24	25 4	33 16	50 08
8	5 " 5	5 "	2	1742	3484	13 16	20 8	27 16	39 18
9	5 " 4	4 "	2	2178	4356	17 00	25 16	34 16	51 00
10	$4\frac{1}{2}$ " $4\frac{1}{2}$	$4\frac{1}{2}$ "	3	2153	6453	25 04	37 22	50 8	75 12
11	5 " 5	5 "	3	1742	5226	20 12	30 18	40 24	61 04
12	5 " 4	4 "	3	2178	6534	25 16	38 08	51 00	76 16
13	5 " 1	1 "	1	8712	8712	34 00	51 00	68 00	102 00
14	5 " 3	3 "	3	2904	8712	34 00	51 00	68 00	102 00
15	5 " 3	3 "	2	2904	5808	22 20	33 30	45 08	67 28
16	3 ft. " 6 in.	6 inches	1	29,040	29,040	113 12	170 02	226 24	340 04

Preparation of the ground.—If the ground you purpose putting your corn in is a *grass sward* or *clover ley*, the sooner you get your manure on the better. Place it in small piles at proper distances to give your field a regular portion throughout, and in order to prevent injury from evaporation, let your hands throw a few spadeful of earth over it. When you are ready for breaking ground, spread your manure and let the plough immediately turn it under, say four or five inches deep. The ploughman should take small slices, so as to be able to perfectly turn down the sod. Let the roller follow the plough, then harrow lengthwise of the furrows, taking care not to disturb the sod. This being done, let a light shov-

el or other small plough, strike out a furrow, also lengthwise, and drop your seed, taking good care not to stint the number of grains you put in each hill, for it is much better to have to *pull up* corn plants than to be necessitated to *replant*.

If your ground is not a *grass sward* or *clover ley*, two ploughings, accompanied by rolling and harrowing, so as to perfectly pulverise the soil will be found infinitely serviceable, but let your last ploughing be more shallow than the first, and in this instance do not put on your manure until just before the second ploughing.

In either case, if you desire, (and who does not?) to raise a heavy crop, if you can possibly spare the manure, let a careful hand follow the

droppers, with a cart, and put a shovelful, or less, of well rotted manure, or rich mould, covering the corn with it. This will give a start not only to the germination of the seed, but will serve to push the young plant at its incipient stage, a matter of great importance. If you cannot spare this extra manure; get ten bushels of ashes and one of plaster, mix them together, and place a gill of the mixture on each hill of corn just as the plants are piercing the earth. If you have neither of these, a table spoonful of salt on a hill will be found an excellent application.

If you have lime to spread on your corn ground, and it be either a grass sward, or clover-ley, distribute it equally over the entire surface of your field before turning down the sod—it will greatly promote fermentation and consequently prepare the food for the plants. If you have no sod to turn down, apply the lime after ploughing and harrowing it in.

As soon as you discover that the corn begins to shew its head, that is before it is all up, pass the harrow lightly over the whole field. This will loosen the soil, greatly facilitate the coming up of your plants, and force them forward.

Preparation of the seed.—Soak your seed corn in a solution of copperas, saltpetre, and sulphur, twelve hours before planting, draw off the water, roll the grains in plaster. Prior, however, to rolling them in plaster if you were to put them in tar gently warmed, and diluted with water you would possibly do better. If you apprehend, however, a dry spell it is better not to soak your seed.

After culture.—The great mystery in the cultivation of corn, consists in keeping it clean from weeds and the soil loose. These can both be effected by timely use of the *Cultivator* and *hoe*. If however you purpose using the plough do it judiciously: and we would advise you not to do so after the roots of your corn are of much size, or have extended to any distance across the rows; for the injury they will receive in cuts and bruises, will more than counterbalance any good they will obtain from the ploughing. If you do plough, turn your furrow from the plant and replace it again as you come down the row: this will pulverise the soil and give start to the plant. The raising a large hill about corn is getting much out of fashion, and, therefore, it is that the *Cultivator* is all sufficient, backed by the hoe, to secure the best possible yield of corn. A slight drawing of well pulverized and mellow soil around the young plants is unquestionably serviceable, but it should not be carried to the extreme of raising a mound to expel the moisture.

A loamy soil is admitted on all hands to be the best adapted to the growth of corn, but should it be moist or situated low, it will be well to counteract the ill effects of situation by laying off your field in small lands with furrows, sufficiently deep to act as surface drains—if it lies high, your field may be ploughed flat.

It will be difficult to prescribe when you should plough, the state of the soil and growth of weeds must indicate that; you will, however experience benefit by passing the cultivator, through and hoeing the corn when the tassels first appear. Once or twice working it after this will be enough.

As soon as your corn shall have grown to the height of a few inches, you must have all the superfluous plants thinned out, leaving the strongest and most healthy plants in the hill. And as *suckers* make their appearance, you must have them carefully taken off.

Time of planting.—Without prescribing a day, it might be well to say that when the apple tree begins to burst its bud is a safe period for putting in your corn. This happens in different latitudes, at different periods, and therefore, it is difficult to arbitrarily fix upon days of planting. In the northern states they generally plant from the 10th to the 20th of May—in the middle from the 10th of April to the 20th of May, and sometimes later; in the south according to situation, an earlier period is devoted to this business. But every planter should bear this in mind, *that it is always best to be rather early than late.*

ROOTS.

We are particularly anxious to see the culture of roots becoming more popular with agriculturists; for we are well convinced that profit, economy and comfort, are all deeply interested in it. Such being the case, we would respectfully point out a few kinds that ought to receive favor at the hands of every husbandman. We will begin with

Parsnips.—This is one of the most valuable roots for feeding all kinds of stock that a farmer can raise; horses, cattle, and hogs, all eat them readily, and fatten upon them. Besides, there are few that yield more luxuriantly, 24 tons having been raised on a single acre; and then they are so hardy, keeping well, without deteriorating in quality in the open ground during the whole of the winter—25 lbs. of Parsnips cut up and given daily to milch cows with their hay, greatly contributes to increase the quantity and improve the quality of the milk, while they impart to the colour and flavor of butter made from the cream of cows fed on them, all that is gained by the

best pastures in May. The mode of culture is simple, and does not require much more labor than potatoes. The ground must be manured well, ploughed deeply, harrowed and rolled—the seed must be drilled in rows, about 15 inches apart. As soon as the plants are sufficiently strong to bear it, they must be thinned out to about 4 inches, and hand-weeded. The soil must be loosened three or four times in the course of the season with the hoe; and kept clear of weeds.

Carrots.—The same culture and treatment must be observed as for parsnips.

Time of planting.—Both of the above roots should be planted early in April if heavy crops are desirable; though any time in that month, or even up to the 10th of May will answer.

BETS—whether the Sugar, the Common, or the Mangel Wurtzel.—With these, as indeed, all other roots, the ground must be a good loam.—Manure well, say from 20 to 30 loads to the acre, plough deeply, harrow and clean the ground thoroughly. The furrows to be about 27 inches apart. To secure the crop, it is best to put the manure in the drill—this is easily done: strike out a furrow, throw the manure into it, cover it over by running a furrow on either side, pass the roller or a rake over the top to smooth it down, then dibble or drill in the seed. The plants should stand about eight inches apart, keep the ground well stirred and the plants clear of weeds, and a good crop will reward your labors.

Pumpkins.—If you have not appropriated a separate piece of ground for pumpkins, plant them at intervals of about 12 feet through your corn field; with little additional trouble they may be cultivated with your corn, and will not much impair its product. The value of boiled pumpkins as early feed for your hogs need not be here dwelt upon—nor need we tell you that for your milch cows they are invaluable.

STRAWBERRY AND RASPBERRY.

THE GOOD QUALITIES OF THEIR FRUIT CONSIDERED.

Those two berries or fruits, on account of their early maturity, easy culture—delicious flavor as a desert, in any way they may be used—and healthful qualities, are universally acknowledged as favorites, and coming at a season when we stand in most need of wholesome refreshment after wintering on rich meats and dry provisions they are acceptable to every appetite.

As soon as the fruit of the strawberry is ripe and gone, that of the raspberry comes in to take their place, and are the next best fruit to eat with cream, and otherwise, where the right sorts are cultivated.

It has been a subject of surprise to me, that

there is not more attention paid to the culture of those very valuable and delicious fruits, when they are so easily raised and require so small a spot of ground to supply a family plentifully, say from ten to twenty square rods of good ground, well prepared, regularly and properly cultivated, would be sufficient in most cases for each sort of those fruits.

CULTURE OF THE STRAWBERRY.

The greatest difficulty attending the culture of this fruit, is to keep the plants bare of weeds and grass that spring up amongst them. In the commencement every care ought to be taken as a preventive; in no case, is the old saying more applicable, "an ounce of prevention is better than a pound of cure." By digging the ground two spits deep and laying the top one in the bottom, the seeds of weeds will by this means be buried so deep as to prevent their vegetating, and by top dressing with ashes or fermented manure, there will be but little difficulty of keeping the plants bare of weeds if the hoeing is regularly performed before the weeds get large.

Make the beds four and a half feet wide, with two feet alleys between them, in these plant four rows of plants, 8 to 12 inches apart, in the rows beginning nine inches from the alleys, and shovel the mould out of those alleys about two inches deep and throw it on the beds, leaving them a little rounding, especially in winter to throw off the water.

The best season for planting, is as soon after the fruit is ripe and gone as possible, until the middle of July and from the middle of September to November—they may also be planted any time when the ground is not freezing, but will require more care in watering, or if planted late will require covering with litter to prevent the frost from throwing the plants out, and under any circumstance, unless the atmosphere and ground is damp when the strawberries are planted they must be frequently watered until they appear to have taken root, and all runners must be shortened as they start from the mother plant, or else they will exhaust the crop and smother it as a weed. The sorts recommended by Lindley, one of the best practical modern writers, is the Early Scarlet, Pine Apple, Hautbois, and Alpines, and their sub-varieties,—out of which he makes his catalogue to contain 232 sorts. He, however, only recommends for a small garden 16 kinds. When the plants are beginning to bloom, lay straw or litter under the vines to keep the fruit from becoming gritty—and should dry weather set in when the fruit has begun to swell, it will amply compensate for the trouble of watering the plants freely; the evening is the proper time, where the water will remain until the next day's sun evaporates it.

RASPBERRIES.

Lindley enumerates in his catalogue 22 varieties but only recommends the following selection for a small garden:—Barnet's Cornish, Double Baring, Red Antwerp, Yellow Antwerp, and Williams' Preserving. McMahon recommends the Red and Yellow Antwerp, Smooth Cane, or Double Baring, and common Red Raspberry, and Forsyth the same. In addition to the last four sorts, I would recommend Brenford's Red; the Antwerps are certainly a very superior Rasp-

berry, but north of the Potomac, they would mostly require to be carefully bent to the ground and fastened there with hooked pegs and covered lightly with straw or other litter, or earth, being rather tender to withstand our winters, but all the others are hardy and very productive.

The ground intended for planting being good or made so, and being provided with good plants and the ground being deeply and well cultivated, lay off the rows five or six feet apart and plant four feet apart in the rows, and cultivate among them so as to keep clear from weeds and grass; and as soon as the plant begins to bud cut the stalk down to the ground, and from the root will spring several suckers; preserve only 2 to 4 of them and hoe up the rest, and those preserved will bear fruit the next season. When this fruit is ripe and gone, cut down the stalks to the ground; by this time many suckers will be growing around where those stakes may have been cut from, select four or five of the best of them, situate in a suitable group around the old stock for bearing fruit the next season, dig the ground among the plants and remove all the suckers except the four or five as above; this must be done as soon as the fruit is ripe and gone—for on this depends the next year's crop being good or bad. In the fall manure them and dig it in, and in the following spring cut about one half of the stocks of each adjoining hill, tie their ends together in the form of festoons, which have a handsome appearance, and will save the expense and trouble of staking the plants and removing the old stakes as soon as the fruit they have borne is gone. Hoeing up the supernumerary suckers and manuring the plants every other year, will very much increase the quantity of fruit, as also its size and superior flavor. By pursuing the above course, good crops may be raised for five or six years, when new plantations ought to be made.

ROBERT SINCLAIR.

GEOLOGICAL SURVEY OF MARYLAND.

SEC. 1.—*Geological Examination of Calvert county, in reference to its agricultural resources.*

There is perhaps no other county in the State, the agricultural resources of which appear to have been so little known, and whose physical condition is so misunderstood as Calvert county. By most persons it is supposed to consist mostly of barren sands and sickly marshes, and to present the aspect of a long, narrow neck of land without beauty or interest. No notion can be more mistaken. The true features of the country are the following.

On its approach from Ann Arundel, as might be expected, the appearance of the country, and the character of its soil, are very much the same as observed in that county; which, in the portion referred to, is known to possess some of the most productive and beautiful farms in the State. The country is hilly. The soil mostly a sandy loam, though occasionally clayey, and generally well adapted to the growth of tobacco, oats and rye. When wooded, the prevailing growths are sweet gum, chesnut, pine, and the American poplar. These characters may be said to belong to the whole middle portions of Calvert county, and to extend as far as St. Leonard's creek. South of this creek, towards the extreme end of

the Peninsula, the soil is a stiff clay, especially on the Bay side, and in its present condition is considered valuable only for its timber, which is principally pine. On the Patuxent side, however, this part of the county offers, in the flats stretching from the foot of the highlands, a clayey soil susceptible of the highest degree of improvement. The same may be observed of those portions that extend from St. Leonard's creek to Hunting creek, that moreover were found to possess resources, presently to be enumerated, by which their productiveness might be increased to any reasonable extent. Improved by means of these resources, the flat-lands now referred to would yield abundant crops of wheat.

Ascending the Patuxent, the river farms were not found to possess the same resources within themselves; their soil too is more variable, in general more sandy; and the country more hilly and broken, the hills extending frequently to the river, presenting bluffs, or cliffs, of considerable elevation—as at Holland's cliffs. Yet in some places, as about Lower Marlborough, there are extensive flats with a well constituted soil, kind, easily improved, and productive. Beyond this, from the mouth of Hall's creek to Lyon's creek, the soil varies considerably, being in some places, as exhibited in the high banks about the Nottingham Ferry, and at the mouth of the last mentioned creek, a mixture of sand and green particles, which on examination proved to be of the same nature as the material frequently referred to in preceding reports, constituting what has been termed the Jersey marl. This article will be more fully described in another place.

But perhaps the most eligible situation in Calvert county, would be found on the Bay shore. In this direction the country is very hilly, possessing a kind soil, easily improved, generally good tobacco and oat lands, and the stiffer portions yielding tolerable wheat crops. This good soil rarely extends, however, beyond one mile from the Bay side, after which it becomes very sandy and sour, throwing up a thick growth of pine. On the richer bottoms, there is an abundant growth of oaks, sweet gum, chesnut, together with the white and yellow ash. The agricultural resources of this part of the county, which will shortly be described, are many, and easily obtained; and if to them be added the beauty of their sites, commanding an extensive prospect over a magnificent sheet of water, and the general healthiness of their location, it will be perceived that the plantations that crown the cliffs of Calvert, do not yield in interest and value to any in the State.

Before proceeding to offer some remarks on the present condition of agriculture in Calvert county, it will be proper to give some account of a great resource which it possesses, abundant in quantity, easily obtained, and yet so far almost untouched. This resource is to be found in the immense fossil deposits, constituting the shell-marl that underlie this county, also presenting themselves on a more extensive scale, and in more accessible positions than in any other section of the State hitherto examined.

Whilst in search of this marl, reasons were presented which rendered it probable that there would here be found at least two distinct deposits of marine fossils, one lying low, continu-

ous and forming the substratum of the country, the other superficial, occurring near the summit of the hills, and which, if ever it was continuous, has been in a great measure removed by the causes that have produced the present irregularities of the surface. With a view therefore of ascertaining this fact, that would materially assist in obtaining proper directions for the discovery of these valuable beds where they happened to be concealed by the superincumbent soil, a preliminary examination was made of that portion of the county lying on the Bay shore. In this direction, there are presented natural sections varying from fifty to upwards of one hundred feet in depth, at which the relative position of the fossiliferous strata to each other, and to the superincumbent soil, can be satisfactorily studied. Some of the most instructive of these sections are herewith given.

At Rock Point, the cliffs present the following geological features in the descending order, viz:

- 10 to 30 feet soil and sand,
- 30 " blue clay,
- 5 to 10 " ferruginous sandstone,
- 20 to 30 " fossil deposit, principally composed of *Pecten* (scallop), and *Cytherea*, (improperly called clams)

At Owing's Landing, between Plumb Point and Parker's creek, the cliffs have here an elevation of about one hundred feet. The blue clay, containing innumerable marine relics, form their base, extending to about ten feet above high water mark; above this is a deposit of mud without fossils, reaching to an elevation of fifty to sixty feet, underlying the second fossiliferous stratum, seldom exceeding three feet in depth: above this again, there is the last uppermost covering of clay, sand and soil about twenty feet deep; amongst which are occasionally seen small accumulations or irregular beds of fossil shells.

The upper portions of the first fossiliferous bed, show commonly only the impressions of shells, sometimes to the depth of five feet; so that when the banks are low, by the sinking of this stratum, no fossil shells are discoverable, but most commonly the vertebrae of a species of *dolphin* can be obtained from this upper portion.

At Mrs. Roberts' landing, adjoining the preceding, the banks exhibit this upper part of the first fossiliferous bed, covered by a continuous stratum of yellow sandy clay, very uniformly six inches thick, above which is the usual deposit of clay, sand, gravel and soil, forming the uppermost portion of the cliffs and banks throughout their whole extent. The second fossiliferous stratum is here wanting; but about three quarters of a mile from the Bay shore, it shows itself at an elevation apparently corresponding with that at which it is found in the more elevated Bay cliffs.

At Capt John Beckett's also, two distinct fossil deposits were observed: one at the bottom of the deep gullies that convey the waters of the inland springs to the Bay, and containing *Pecten*, (scallop) *Perna*, *Venus*, (clam,) &c. imbedded in a blue sandy clay; the other near the top of the hills, also principally composed of *Pecten*, deposited in a red ferruginous sand.

Sections of the cliffs between Little and Big

Cove Points, exhibit the following disposition of the strata in a descending order, viz:

- 10 to 15 feet soil and sand,
- 2 " 5 " ferruginous sandstone,
- 30 " blue sandy clay,
- 20 " 50 " fossils, consisting principally of *Turritella*, *Fusus*, *Pecten*, *Venus*, &c.

At Mr. Joseph S. Wilson's landing, the cliffs, that are among the highest on the Bay-shore, exhibit the fossiliferous stratum, reaching to an elevation of upwards of fifty feet from high water mark, scallop and clams being the predominant fossils. In the upper portions of this fossiliferous stratum, the scallops greatly predominate, being in some places firmly bound together by a ferruginous cement. Large masses of these are occasionally detached, that strew the beach, and finally become indurated into a rock of considerable hardness.

Not far from this, at Mr. Samuel Turner's landing, the fossil deposit lying immediately above the clayey sand, is composed almost entirely of *Perna*, and a species of coral. The bank in this place is low.

At Dr. Thomas H. Bond's, between Governor's run and the Flag-ponds, the banks or cliffs, are elevated from sixty to eighty feet above tide, and present a continuation of the fossiliferous deposits, containing an abundance of the *Panopea reflexa*, *Perna maxillata*, *Venus mercenaria*.

This deposit rests immediately upon the bluish sandy clay, which is also fossiliferous, but presents a distinct line of demarkation with the superincumbent stratum, its constituents being closely matted together, whereas in the other, the shells are deposited in a loose sand of a yellowish colour.

But perhaps the most interesting spot at which to determine the geological features of the county, is on the north side of Governor's run, on the plantation of Mr. Frazier. In this locality the cliffs are upwards of one hundred feet high and afford a luminous view of all the strata containing fossils as well as many of the intermediary ones, thus furnishing useful directions for the research of those beds that are sought after for marl. The following section exhibit a nearly correct representation of the different strata, as to their order of superposition; but owing to the precipitous nature of the bank—almost perpendicularly elevated—it was impracticable, when visited, to obtain more than an approximation to their depth and general characters.

Section of Frazier's Cliffs, Governor's Run, N. side.

(IN THE DESCENDING ORDER.)

- 1. Soil, being a substratum of clay covered by a sandy loam, about 10 feet.
- 2. Upper fossil deposit, mostly *Perna* and *Pecten*, 4
- 3. Yellow sand, no fossils, 15
- 4. Bluish clay, with few shells much decomposed, 20
- 5. Thick bed of fossils in a reddish earth, principally *Panopea reflexa*, 10
- 6. Black earth, with few shells much decomposed, 20
- 7. Continuation of the black earth, or mud, with some shells, 5

- 8. Bed of shells, mostly *Pecten*, 8
- 9. Clayey sand, bluish and greenish, 15
- 10. Lowest or first fossil deposit, with a great variety of marine shells, and vertebrae of the *Delphinus*, 5

107 feet.

These sections, that are now given principally as indices of the marly deposits, will also serve to form an idea of the vast accumulation of marine exuviae contained in our tertiary formations. And yet it is only the extent of these beds above tide that they display. How far they would be found to reach below the waters of the bay, there has been so far no means of determining with certainty. The only information obtained and received from very creditable and intelligent authority, is that in sinking a well to the depth of seventy-six feet on Holland's island, the level of which is nearly one hundred feet below the summits of the cliff, the following strata were traversed, viz:

- 1. Stiff clay, about 8 feet
- 2. Blue earth, 28 "
- 3. Bed of large oysters, 2 "
- 4. Fossil deposit of mixed shells, 39 "

without penetrating through it. As no shells from this deposit have been collected it is impossible to determine whether it be geologically identical or not with any of the preceding.

Having thus obtained an insight into the geological constitution of the county, ascertained the great extent of the shell marl deposits, and determined their position in reference to the superincumbent soil, it was confidently anticipated that they would be found to occur in numerous accessible positions inland. Accordingly, they occasionally lie so near the surface that their contents are turned up by the plough; sometimes they are traversed through their whole depth by the main roads; and the lowest stratum scarcely ever fails to make its appearance in the beds of the numerous small streams running either into the Bay or into the Patuxent river. In all these situations they are more or less available to the agriculturist.

Considering alone the three principal deposits of shells, the uppermost will be found to be the least abundant, and the least valuable. It is in a great measure composed of scallops imbedded in a red ferruginous sand, and although these shells are in a more advanced stage of disintegration than those of a similar kind are usually found to be, the marl which they yield, together with the surrounding material being principally sand, found to average not more than 20 per cent. calcareous matter. In other localities, mostly on the side of a hill, it presents large masses of a silico-calcareous rock, formed by the induration and agglutination of its constituents. A deposit of this kind, composed of *Pecten*, *Perna*, *Panopea*, occurs on the plantation of Mr. R. Harrison of R.; and a similar one at Mr. Richard Beckett's where the high banks on the south side of Hunting creek offer a bed of marl of the same character.

The second or middle bed is that which appears to be most frequently intersected by the

roads. It was observed only in the upper parts of the county, and in the lower parts of Anne Arundel: it will be referred to again.

The main supply of marl, then is to be derived from the lowest fossiliferous deposit, consisting of a great variety of marine shells, imbedded in a clayey sand. This deposit is believed to form the substratum of the whole county, and, as already stated, almost every where occurs in the bed of the streams, even at their head waters.—It is in fact here, that the numerous springs of excellent water, with which the county is so abundantly supplied, make their issue; the loose and porous condition of the superincumbent soil, forming a natural filter through which the waters percolate, are purified, and finally arrested by the more compact beds of marl.

It is needless to specify all the localities at which the marl occurs under the circumstances that have been just enumerated, as they have been already indicated to those immediately interested in them. Suffice it to say, that scarcely a ravine has been visited, in which it was not found to occur, and mostly in situations whence it can be easily extracted. As *shell-marl* it is of excellent quality, containing from 50 to 60 per cent. and upwards of carbonate lime, with variable proportions of silica and alumine. The manner of using it will be more particularly adverted to presently.

On the Patuxent side of the county, immediately on the banks of the river, the fossiliferous deposits are of little importance as an agricultural resource. Those that might possibly be put to account are at the mouth of St. Leonard's creek, and at Holland's cliffs. At the former place the shells are formed into indurated silico-calcareous rocks; though occasionally sufficiently friable to afford a marl in the absence of more convenient sources of lime. At Holland's cliffs there is a bed composed chiefly of oysters, scallops and casts of *Perna*, at an elevation of forty feet above tide, having a substratum of clayey sand, and covered by gravel and soil of various depths. The banks in this locality have an elevation of from thirty to sixty feet and upwards, and the deposit of shells just mentioned is referrible to the second or middle fossiliferous deposit. It can hardly be used as marl. But more inland, at the heads of the creeks, and the ravines that furnish their head streams, the rich lowermost marl occurs under the same circumstances as in other parts of the county.

In thus indicating the sources whence calcareous matter may be obtained, it should not be neglected to mention another of which Calvert, like all the other counties on tide waters, is equally possessed; namely, the great accumulations of oyster-shells that are seen at the mouth most commonly of nearly every creek. The most extensive of these that may be indicated are, on the one side, at the mouth of Fishing creek, and on the other, at Buzzard island point, Hollowing creek, and at the mouth of Mill creek.

In the upper parts of the county, and likewise on the Patuxent, at the mouth of Hall's creek, there is a deposit of a bluish black sandy clay, forming the bank of the river with an elevation of from ten to twelve feet. No fossils were observed in this place; but the clay is much mixed with particles of green sand. The higher banks

at the Nottingham ferry, extending to the mouth of Lyon's creek, exhibit also a mixed green sand, forming a substratum of from eight to ten feet covered by sand, gravel and soil of about the same depth. Specimens of this mixed green sand, collected at various places along this shore, have yielded from 30 to 50 per cent. of the green particles.

It remains now to show to what uses these resources may be applied.

[From the New York Star.]

SILK MANUFACTURE.

The manufacture and culture of silk is about to be prosecuted with zeal by the Philadelphians. A large meeting has been held for the purpose of establishing a company. Nicholas Biddle Esq. who is ever ready to promote all useful enterprises, was in the chair.

The commissioners to receive subscriptions are some of the most eminent and wealthy persons of the city. They are authorised, when 1000 shares are subscribed, to purchase at once the machinery and establishment of Messrs. Upton and Jackson. The preamble to the report contains much valuable matter. In reference to the advantage and facility of the culture in this country, it says:

The mulberry trees flourish best in cultivated fields, and one of the most approved methods of obtaining the leaves for the food of the silk worm, is from mulberry hedges, which may be made, and securely used for the division of a farm; into fields, instead of the usual fences much more costly, and always exposed to injury and decay.

The periods of the year in which the silk worm is fed, and when only the attention of the farmer and his family is required for their care and management, are those in which the usual labors of a farmer are, for a great portion of those periods, not very great; and a large amount of the attention and industry which are required by the silk worm when feeding, and making the cocoon, are most properly furnished by females, and by children from 12 to 16 years of age. In the winter season, the family fireside of the farmer, now comparatively without employment, may be engaged in reeling the silk from the cocoons, a most agreeable & profitable occupation for that part of the year.

A large amount of free labor will be brought into employ, and the domestic silk trade of the north will one day rival that of cotton, rice and tobacco at the south.

In Pennsylvania there are already many hundred acres planted with the mulberry. These plantations will be increased when it shall be known that a certain market exists for the cocoons, and for reeled silk at a fair price. Small lots of cocoons are offered daily and the committee entertain the belief that in 1837, one fourth of the supply for a manufactory of a moderate extent can be obtained from American cocoons. In three or four years, a manufactory with machinery and buildings, requiring a capital of \$100,000, may be supplied with American silk.

Three hundred and ten good cocoons make one pound, and eight pounds of cocoons give

one pound of reeled silk. At that rate, the reeling being done at the manufactory, the cost of the silk will be about \$5 per pound. When cocoons are produced in abundance, the committee are disposed to believe that at 12 1-2 cents a pound, the raising of them will be as profitable as growing cotton at 15 cents per pound.

Raw Silk—At the first going off our manufactories must depend chiefly on foreign raw silk.

The present prices of foreign raw silk are—Bengal \$4.25 to \$6 per lb. China \$5.50 to \$6—Italian \$6.60 to \$7 per pound.

The amount of manufactured silks imported into the United States, in the year ending the 30th September 1835, was \$17,497,900.

MACHINERY—Silk is manufactured in France principally by adult labor but the introduction of machinery in the manufacture of silk, which is the ratio of 90 per cent. in the hundred, reduces the cost of manufacture from 50 to 80 per cent. England by the use of machinery, has become the successful rival of France, in many articles of silk manufacture. Let the ingenuity of America be applied to silk machinery, as it has been to the machinery for making cotton and woollen goods, and its success will be the same. The higher cost of adult labor in the United States, will thus be rendered comparatively unimportant.

The expenses of machinery are not heavy, as silk machinery is always light in its construction, and requires no great power to keep it in motion. A six horse power steam engine will move the machinery to manufacture two hundred pounds of raw silk per week—and a building of 30 feet in width, by 225 feet in length, 3 stories high, will be sufficient for all the purposes of manufacturing, dyeing and packing that quantity of silk within its walls.

PLAIN SILK—The estimate is made with confidence, that an establishment for the manufacture of silk into plain and ordinary articles, will cost no more than about one eighth of a cotton factory, to turn out the same number of dollars worth of work, and with equal if not greater profit.

While it is claimed, that all articles made from silk can be manufactured here, it is not considered desirable at present to undertake the making of any but plain staple goods; such as floss and sewing silk, twist and stuff for gentlemen's wear, vestings, plain ribbands, and grey silks for printing pocket handkerchiefs.

Floss and sowing silk made from Bengal silk would cost,

Raw material, say	\$2 25
Dyeing, manufacturing & waste,	1 50
Lb. of 14 oz.	\$6 75

Those articles are now worth	
Sewing Silk	10 to 11
Floss,	11 to 12

Made from American cocoons they would cost \$4 per pound. It is estimated that gray plain Silks, and white pongees can be made as good as imported from Canton by hand looms of Bengal Silk, to a profit at the present prices of the article in the market—When made by power looms, and with American Silk they will yield a profit of not less than 30 per cent.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 75	
CATTLE, on the hoof,.....	100lbs	6 50	8 50
CORN, yellow,.....	bushel	90	91
White,.....	"	85	86
COTTON, Virginia,.....	pound		
North Carolina,.....	"		
Upland,.....	"	18 1/2	20
Louisiana 20a21-Alabama	"	18	21
FEATHERS,.....	pound.	50	
FLAXSEED,.....	bushel.	1 62	1 75
FLOUR & MEAL—Best wh. wh't fam.	barrel.	12 00	13 00
Do. do. baker's, ex.	"		
Do. do. Superfine, ex.	"	10 37	10 37 1/2
SuperHow. st. in good do'd	"	10 37	10 73 1/2
" wagon price,	"	10	10 25
City Mills, super,.....	"	10 00	dull
Do extra,.....	"	10 00	10 25
Susquehanna,.....	"		10 50
Rye,.....	"	7 25	7 40
Kila-dried Meal, in hhd.	hhd.		21 50
do. in bbl.	bbl.	4 87	5 00
GRASS SEEDS, red Clover,.....	bushel.	8 00	8 50
Timothy (herds of the north)	"	3 25	4 00
Orchard,.....	"		2 75
Tall meadow Oat,.....	"		2 75
Herds, or red top,.....	"		1 25
HAY, in bulk,.....	ton.		20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	7 75	8 50
Slaughtered,.....	"	7 25	7 75
HOPS—first sort,.....	pound.	16	
second,.....	"	14	
refuse,.....	"	12	
LIME,.....	bushel.	35	37
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	62	65
PEAS, red eye,.....	bushel.		
Black eye,.....	"	1 12	
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.	4 75	
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	1 35	1 40
Susquehanna,.....	"		
TOBACCO, crop, common,.....	100 lbs	3 50	4 50
" brown and red,.....	"	4 50	0 00
" fine red,.....	"	7 00	7 90
" wrappery, suitable	"		
for segars,.....	"	5 00	10 00
" yellow and red,.....	"	6 00	8 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	5 00
" ground leaf, ..	"	5 00	8 00
Virginia,.....	"	7 00	14 00
Rappahannock,.....	"		
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.		2 30
Red, best,.....	"	2 20	2 25
fair to good 180a200 inferior,	"	1 25	1 75
WHISKEY, 1st pf. in bbls.....	gallon.	42	42 1/2
" in hhd.,.....	"	39 1/2	
" wagon price,.....	"	36	37
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 75	
To Wheeling,.....	"	2 00	
WOOL, Prime & Saxon Fleeces, ..	pound.	50 to 60	30 32
Full Merino,.....	"	45 50	28 30
Three fourths Merino,.....	"	42 45	26 28
One half do,.....	"	38 42	26 28
Common & one fourth Meri.	"	35 38	26 28
Pulled,.....	"	38 40	26 28

Howard st. Flour, sales limited, receipts very light.

CONTENTS OF THIS NUMBER.

Prospectus of this Journal—timely observations on appropriate objects of Spring Culture—modes of cultivating the Strawberry and Raspberry—Geological Survey of Maryland—formation of a company for Manufacturing Silk—Advertisements—Prices Current.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	17	18
Shoulders,..... do.....	"		15
Middlings,..... do.....	"		15
Assorted, country,.....	"		14
BUTTER, printed, in lbs. & half lbs.	"	25	37
Roll,.....	"	20	28
CIDER,.....	barrel.	1 00	1 25
CALVES, three to six weeks old....	each.	4 50	6 00
Cows, new milch,.....	"	35 00	50 00
Dry,.....	"	10 00	13 00
CORN MEAL, for family use,.....	100lbs.		2
CHOP RYE,.....	"		2 25
Eggs,.....	dozen.	18	25
FISH, Shad, No. 1, Susquehanna,	barrel.		
No. 2,.....	"		
Herrings, salted, No. 1,.....	"	3 50	
Mackerel, No. 1,..... No. 2	"	9 50	10 50
No. 3,.....	"		6 75
Cod, salted,.....	cwt.		
LARD,.....	pound.	16	17

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	U. S. Bank,.....	VIRGINIA.
Branch at Baltimore,.....	do	Farmers Bank of Virginia 1
Other Branches,.....	do	Bank of Virginia,..... 1/2
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore,.....	par	Petersburg,..... do
Hagerstown,.....	1/2	Norfolk,..... do
Frederick,.....	do	Winchester,..... do
Westminster,.....	do	Lynchburg,..... 1
Farmers' Bank of Mary'd, do		Danville,..... 1
Do. payable at Easton,....	1/2	Bank of the Valley,..... 1
Salisbury,..... 1 per ct. dis.		Branch at Romney,..... 1
Cumberland,..... 1		Do. Charlestown, do
Millington,..... do		Do. Leesburg,..... 1
DISTRICT.		Wheeling Banks,.... 2 1/2
Washington,.....		Ohio Banks, generally 4a5
Georgetown,.....	Banks, 1/2	New Jersey Banks gen. 2a2 1/2
Alexandria,.....		New York City,..... 1/2
PENNSYLVANIA.		New York State,..... 3a3 1/2
Philadelphia,..... 1/2		Massachusetts,..... 2 1/2
Chambersburg,..... 1		Connecticut,..... 2 1/2
Gettysburg,..... do		New Hampshire,.... 2 1/2
Pittsburg,..... 2a2 1/2		Maine,..... 2 1/2
York,..... 1/2		Rhode Island,..... 2 1/2
Other Pennsylvania Bks. 1 1/2		North Carolina,.... 3 1/2
Delaware (under \$5),.... 3a4		South Carolina,.... 3 1/2
Do. [over 5],..... 1a2		Georgia,..... 4a5
Michigan Banks,..... 6a		New Orleans,..... 6a7
Canadian do,..... 6a		

SPANISH JACKS.

The subscriber has for sale five Spanish Jacks, imported in 1836. They are all young, and certified to be proved breeders. They are of good size, being from 52 to 55 inches in height, stout built and healthy: colors white and gray.

The exportation from Spain of Jacks of this quality and breed is by law strictly prohibited; but the near approach of the army under Gen. Gomez last fall to Malaga, caused the shipment of these Jacks, among other valuable property, from that port. Considering these circumstances, it is improbable that another opportunity of procuring such Jacks will occur. These will be sold for from \$1,000 to \$1,500 each, if immediately applied for, but if not sold soon, they will be placed at service for the season at hand.

Also, a young Jack, bred in this country from first rate stock, gray, two years old, and of good promise. Price \$500.

Also, several fine JENNETS, some of them in foal to a Maltese Jack, 14 hands high.

Also, a very fine improved Durham short-horn BULL, purchased at Col. Powell's sale last November. He is about eighteen months old, nearly all red, and has a perfect pedigree. Price \$300. Apply to

J. J. HITCHCOCK,
Agricultural Agent, No. 5 South Fifth street,
Feb 28—4t Philadelphia.

GARDENER WANTED.

A single man, or one with a small family, competent to take charge of a market garden of three or four acres, may hear of a situation by applying to the editor of this paper, or to R. Sinclair Jr.

March 10

20,000 MORUS MULTICAULIS TREES.

The subscriber has received the first parcel of an invoice of 20,000 Morus Multicaulis trees, which he offers or sale on pleasing terms for cash. They are warranted genuine, and if taken in their original packages bargains may be expected.

EDW. P. ROBERTS,
March 7. 4t. Baltimore, Md.

GARDEN SEEDS.

The subscribers are now opening a superior lot of GARDEN SEEDS, growth of 1836. The most prominent seeds received and for sale are—
250 bushels Garden PEAS, of various sorts.
150 do Dwarf and Pole BEANS.
2000 lbs. CABBAGE SEEDS,



among which are Scotch Early York, a superior cabbage; Flat Dutch, Drumhead, Savoy, Early Bullockheart, Early French, &c.

250 lbs. CUCUMBER SEED, of various sorts, including Keene's fine long green, white spined, &c.

1500 lbs. Mason's scarlet short top RADISH SEED; yellow turnip, long white, and every other variety of Radish.

1000 lbs. Mangel wurtzel, French Sugar and Table BEET SEED.

50 lbs. Kale Seed of various sorts
200 " Carrot Seed for table and field

30 " Lettuce Seed, several finest kind
250 " Onion Seed

300 " Ruta Baga Seed
Also, Tart Rhubarb Seed, Tomato, Egg Plant, Squash,

Salsafy, Spinach, Okra, Leek, Celery, Endive, &c. &c.

FIELD SEEDS—English Perennial Rye Grass Seed; Lawn Grass; yellow and scarlet Trefoil; Lucerne; English and American Oats; Huskless Oats; Gamma Grass

Roots and Seed, early and late Potatoes; 10 kinds Corn, best early and late sorts; Albany field and Cow Peas;

Clover Seed; Timothy; Herd Grass; Millet; Orchard Grass; Buckwheat; and in short every other Seed, Tool

or Implement appertaining to the want of the farmer and gardner.

ROBT. SINCLAIR, Jr. & Co.
March 7. Light, near Pratt street wharf.

LIME-SPREADER.

J. S. EASTMAN, PRATT-STREET.
Has now finished several of the above machines. The price is fixed as follows:

For the machine complete,.....	\$100
Do. exclusive of the wheels, shafts and axle, 60	
For applying the machinery to a common cart 45	
For the machinery alone.....	40
Including the patent fee in each case.	fe 28 3t

MORUS MULTICAULIS SEED.

THE undersigned offers for sale the seed of genuine Morus Multicaulis, imported from France by Smith and Sons, New York, and warranted the growth of 1836. Said seed is put up in half oz. papers, and will be sent per mail free of charge to any part of the U. S. on the receipt of \$3 for one, or \$5 for two papers. Notes of all solvent banks received in payment. This seed is warranted to produce the genuine Chinese variety, and the money in all cases will be refunded on satisfactory proof to the contrary. Short directions for culture furnished each order.

Feb. 1837—29 SETH WHALEN, P.
Whalen's store, New York.

GAMA GRASS ROOTS.

JUST received and in fine order, 15,000 GAMA GRASS ROOTS. This grass is particularly adapted for soiling, bears cutting every fifteen days, and of course the product is immense. Price per 100 roots, \$2.

ROBT. SINCLAIR, Jr. & Co.
mh 7 Light, near Pratt street wharf.

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